Chapter 3 VET Research in Relation to VET Policy, Planning and Practice in 2013

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Abstract This contribution focuses on the evolution of relations between VET Research, VET Policy and VET practice which changed since the 1960s, due to changes in stakeholder relations in policy making and in the position and composition of the research community. The gap between education practice and education research is proposed and analysed, which accounts to both the research community and the practice of education. To solve these problems, three aspects could be taken into account: research communities take the lead in identifying and specifying innovation needs; professionals in education and researchers in research projects establish cooperation; boundary crossings between communities are facilitated. Two challenges for brokerage institutes are figured out: the ownership and the position of the brokerage institute in selecting information.

3.1 Introduction

In the 1960s links between national policy and research agendas intensified. It was an era of optimistic expectations about the benefits of research for policy making. In David Apter's famous phrase: 'the application of knowledge by political means—and not responsiveness of government to private wants—becomes a test of good government' (Apter 1967, p. 433). In the Netherlands, the establishment of the Dutch Scientific Council for Government Policy (WRR) in 1972 is a good example of the need that governments felt for founding decisions on scientific knowledge, for it was welcomed as a break from the tradition of grounding policy decisions on recommendations of Advisory Bodies representing public interests. In the Council's own words: 'this was a period in which advisory councils were used

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mainly in specific policy domains and to increase the public voice in policy decisions. The WRR was a new kind of institute with a new kind of task' (http://www.wrr.nl/en/home/).

In the field of education, massification of secondary education proved to be an important driver for linking policy and research agendas these days (Coombs 1968). However, the great variety of school types, the average (small) size of schools, and the number of education-related topics called for a *middle ground* for bringing scientific knowledge into the schools. In the Netherlands it took the form of an education infrastructure linking national policy stakeholders, members of the education research community and schools. This infrastructure was inspired by the industry-based RDD model, albeit on a sector (education), rather than on a company scale. Financed from government budgets and based on policy priorities agreed upon by national stakeholders, new policy aims were translated into operational models ready for use in educational practice. A process led by researchers and consultants; the role of schools, i.e. teachers, were to try out and validate the models till perfection. This innovation chain was fostered by academic research in terms of feeding these concepts with academic knowledge. Research results were subsequently made accessible to the schools via an education support structure acting as the intermediary link in the chain. Consultants were responsible for the implementation of the concepts in practice. In knowledge terms, for translating research outcomes into classroom practice. A popular metaphor describing the way research-based knowledge came into the reach of teaching staff was the 'perforated onion'; knowledge from the core trickles through the skins until the outer skin, education practice, is reached (de Bruijn and Westerhuis 2004; Jochems 2012a).

In the 1980s this infrastructure eroded. In this period all over Europe tension grew between the public expectations of education systems and the actual performance of these systems, while the belief in the ability of national governments to bridge this gap was strongly reduced. Government withdrew from a number of public domains; governing education from a national level was no longer seen as an effective strategy (Karsten 2006). Not by accident, school autonomy in terms of education policy making coincided with government initiatives to stimulate mergers of small schools to become large-scale education institutions. Tensions between public expectations of education and the performance of education had to be solved at local level; by local agents. In the Netherlands, the now much larger schools were expected to take the initiative to reform and develop a school-based innovation policy in close communication with local stakeholders. Hence, a substantial part of the government's budget for the innovation of education was taken from the chain structure and added to school budgets; a substantial section of the national innovation budget was reallocated to the schools (de Bruijn and Westerhuis 2003). The almost monopolistic position of the government in defining innovation priorities evaporated; decision making on innovation priorities had to be shared by the schools, their national bodies and local stakeholders. In particular in VET this process had a profound impact on the relations between (VET) research, policy and practice.

However, not only changes in governance relations had their impact on relations between research, policy and practice. In particular, the last decades saw knowledge turning into one of the most powerful economic drivers. A by many unforeseen consequence of 'the knowledge economy' is loss of status of people working in traditional intellectual professions and the loss of authority that came with this position. In the eye of policy and practice, researchers are no longer members of a 'high priesthood' (McNiff 2002) who know all and know best. Almost by definition the knowledge economy assesses knowledge in terms of value for production; it is valued from its capacity to improve; the production of knowledge is under an industrial regime in its subservience to improvement and efficiency, and hence critique (Wilde 2001; Drucker 1969). Instead of replacing managers and businessmen as the new society elite (Bell 1974), knowledge workers have lost their aureole of exclusiveness; knowledge production turned into a service offered by a mass of knowledge workers. The research community saw itself transformed from a small exclusive university-based network into an industry with open boundaries (Gibbons et al. 1994). Not only in terms of employees, but also in terms of the definition of knowledge (see for instance Lyotards rhetoric question: 'who decides what knowledge is?' (Lyotard 1984, p. 9).

Not only in the Netherlands, but also in other countries the chain broke, for more or less the same reasons. In Germany for instance, a decreasing lack of consensus between the stakeholders in VET resulted in a scattered landscape with stakeholders pursuing (and financing) their own research priorities (Lauer-Ernst and Hanf 2008). As we have seen, in the Netherlands growing tensions between (conflicting) public expectations and the actual performance of education systems were laid on the plate of individual VET schools. In Germany, due to growing complexity of relations between the National State, Bundesländer and the Social Partners, VET policy making reached a deadlock. Another similarity is the growing number of organisations commissioning educational research and a growing number of institutes offering research services. However, whereas in the Netherlands educational research is commissioned by schools and the infrastructure transforms into a market place, in Germany the metaphor of an Arms Race intending to break the deadlock seems more to the point: 'Much educational research— some of it highly significant for policy— is now conducted outside of the universities and of government. Not only do consultants in the private sector play an enhanced role, but also think tanks, political parties, trade unions and voluntary organisations appear to have grown influence' (Lawn and Rees 2007, p. 53).

In summary, relations between VET Research, VET Policy and VET practice changed because of changes in stakeholder relations in policy making and because of changes in the position and composition of the research community. The concept of a chain between policy, research and practice became obsolete not for one, but for various reasons:

• growing numbers of organisations regarding themselves to be stakeholder (policy agent) in VET;

- growing numbers of organisations and bodies having the means for commissioning research;
- growing numbers of agencies offering research services to schools and stakeholders;
- changes in the appreciation of knowledge from an authority in its own right into a service under a market regime and to be performed by many and for many.

This brings us to the interesting question whether it will be possible to find new ways to organise VET Researchs as a public body of knowledge; public in the meaning accessible for educational practice; to non-economic metaphors for describing relations between VET Research and VET Policy. This is the subject of this article.

3.2 What is the Problem?

Despite the much wider availability of research services, of research-based knowledge and professional support for school teachers, the idea of a gap between education practice and education research is widespread. Numerous publications and workshops are dedicated to this subject. The American National Research Council sees *a sharp divide between education research and the practice of education in schools* (National Research Council 2002, p. 14). Other authors use qualifications like 'crises' (Badley 2001), 'black hole' (Miller 1999) and 'credibility gap' (Levin and O'Donnel 1999), the need for bridging the research–practice gap (Hirschkorn and Geelan 2008). The OECD voices its concern in a more optimistic phrase by referring to new challenges for educational research (OECD 2003), but all in all the relation between research and practice is qualified to be in crises. So, what is the problem?

According to Jochems, public attention for 'the gap' in the Netherlands grew in substance after 2003 induced by reports from two government-oriented advisory bodies: the Education Council and the Advisory Council for Science and Technology Policy (Jochems 2012b, p. 411), leading to an avalanche of new publications on this subject, most of them written by researchers and published in periodicals and book series read in the research community (To name a few: de Bruijn and Westerhuis 2003; van der Sluis 2004; Broekkamp and van Hout-Wolters 2007; van Braak and Vanderlinde 2012). This *unilateral* response feeds the idea that the gap is foremost felt by the education research community. Even more so because of the reasons given for this estrangement. Broekkamp and van Hout-Wolters for instance identify four core problems, three of them related to the inability of practice to utilise research outcomes: (1) outcomes are either 'open doors' or too specific for daily classroom practice, (2) while *potential* applications of outcomes are ignored and (3) competences and support are lacking for transferring outcomes into behaviour and skills (2007).

Jochems' focus point is the academic education research community. The introduction in 1983 of new funding conditions for financing research in education has stimulated researchers to look for appreciation within the (international) research community (high scores for publications in peer reviewed journals, preference for manageable research designs, sensitivity to trendy topics), appreciation from the community of practice coming second. Another profound change can be found in the composition of the education research community. Earlier generations of education researchers started their working life as classroom teachers before joining the academic community, while new generations started their academic studies directly after leaving secondary education. Together with the fragmentation of the community in numerous sub-specialisms the result is a redefinition of research questions (in academic rather than practical terms) and inability (and need!) to define outcomes into the language of the teaching community (2012a). In other words, this academic community started as a community for and from teachers.

A striking illustration can be found in the career of one of the founding fathers of education research in the Netherlands, Leon van Gelder:

Box1: Career and mission of Dr. Leon van Gelder, founder of the education research discipline in the Netherlands

After having combined a teaching job in primary education in the slums of Amsterdam with a part time academic study directly before World War II, Leon van Gelder dedicated his working life to the innovation of education. First of all by founding the Pedagogical Centre of the Dutch Teacher Union; a national centre of learning for teachers.

In 1964 he was appointed as one of the first professors in the newly defined academic discipline of education research. On this occasion he defined to be the aim of this new field of multidisciplinary educational to be '*helpful to educational practice, to solve its problems and to innovate both the structure and content of education*' (Creemers 1981, p. V).

It is relevant to notice that being helpful to educational practice did not mean that the program for education research ought to be based on an inventory of educational problems as defined by teachers. For van Gelder educational research should be in the service of the innovation of society. Education research should help schools to implement integrated innovative educational concepts (Postma and Wardekker 1981).

In conclusion: the RDD concept mentioned earlier, could also be successful because researchers and teachers were united in defining the overarching aim of education research in the innovation of education as a social field and also because researchers understood the problems of teachers from their own teaching experience and were able to communicate their findings in the language of teachers.

What is lacking in this analysis, though, is awareness of the changes in the world outside the academic community. The RDD concept was a success because of consensus about the (policy) aims of education between all parties, a limited number of well-organised stakeholders and funding from one budgetary source (government). Not only the academic world has changed. It is not enough to look for a new mission to be shared by researchers and practitioners. Jochems' suggestion to take innovation of education as guiding principle for both the life-long professional development of teachers and the education research agenda ignores these changes (Jochems 2012b). Innovation as defined by whom? Who should be in- and excluded in the process of defining research aims? On what grounds? Are research programmes open for researchers outside academia? Are we sure practitioners are willing to have their classroom problems clustered around research questions? And are we sure researchers are willing to have their research questions clustered around the problems as defined by the education community? Who will validate this programme? This question in particular is relevant for VET, as despite the growing numbers of participants, VET is still in the limelight of the education research community's interest (Commissie Nationaal Plan Toekomst Onderwijswetenschappen 2011). Foremost, how to define education research these days? Education is not only object of study for the traditional education-pedagogical discipline, but also for academic disciplines like sociology, neuroscience, psychology, law or economics. As we have seen, innovation was the basic principle of the RDD concept, but there is little ground for the assumption that its integrating spell can be revived.

Is the conclusion therefore that the gap between education practice and education research is first of all a problem for the academic research community? The urge to be of more relevance for educational practice is most certainly felt in the education research community (van Braak and Vanderlinde 2012). For Furlong and Lawn the raison d'être of educational science is even at stake when this gap is not closed '*if they are to survive, the disciplines of education need to make their case as important contributors to applied work. It will, in our view, be increasingly difficult to sustain an argument that their contribution is only in terms of 'pure' research*' (Furlong and Lawn 2010, p. 185).

However, from a wider perspective this gap is also a problem for the practice of education. The sub-division of education research into specialised fields of research and the rise of education-related sub-specialisms in other disciplines are not only side effects of a process of internationalisation and the rise of funding arrangements on a temporary basis.

Box 2: factors having an impact on early school leaving

In 2008 the Netherlands Institute for Social Research/SCP, a government agency conducting research into social aspects of government policies came up with a list of factors having an impact on early school leaving, identified in research reports (Herweijer 2008, pp. 171–180).

Factors found in international research:

- The structure of the education systems: generally speaking, the student's home setting has a bigger influence on the risk of school dropout in stratified systems, e.g., systems where students are placed in different streams in the first phase of secondary education.
- The education attainment level of parents: countries where the vast majority of parents have a secondary or higher education background, score better than countries where lots of parents have a low education level.
- The achievement level of 15 year-olds: the percentage of dropouts tends to be higher in countries where large numbers of students perform weakly.
- The physical equipping of schools: high (government) spending per student in secondary education generally correlates with a lower school dropout rate.
- The level of education: the risk of dropout at the lowest level of secondary education and VET is roughly three times the average.

Factors found in national research:

- Risk for students receiving learning support: learning support is found to be a risk factor for dropout in the early years of the lower levels of secondary education programmes in particular.
- A poorly developed career perspective in the final phase of secondary education.
- The open admissions system in the lower levels of VET helps to keep down the dropout rate in the short term, but in later stages the risk of dropout is much greater among this group of students than among those who entered by virtue of their secondary education qualification.
- The backgrounds of students: boys drop out of school more often than girls; pupils from single-parent families will drop out more often than children from families with two parents; there are marked differences between students from low and high income groups and students from families whose parents are not in paid employment are at greater risk.
- High dropout rates among ethnic minorities: the dropout rate among non-Western ethnic minority secondary school students is roughly twice that of indigenous students.
- Degree of urbanisation: the dropout rates in the largest cities in the Netherlands are twice as high as in smaller municipalities. At district level, the dropout rate among students from disadvantaged neighbourhoods is twice as high as among students from other neighbourhoods.
- Dropout and educational quality: schools with high dropout rates do less well in meeting the standards in relation to quality assurance, teaching content, the didactic quality of teachers, the learning climate and the support provided to students with special requirements.

• Differences between VET schools: differences are related to the training level offered and the backgrounds of the students. Characteristics at school level, such as the size of the establishment or the concentration of non-Western ethnic minority students, do not explain differences in the dropout risk between individual schools.

The box illustrates the effect of researching an aspect of education from various angles. In this case of research into one of the most persistent problems in Dutch VET, early school leaving. It brings us the insight that—in particular—persistent problems are multidimensional not only to be solved by schools, but also teachers for that matter.

Thanks to the massification, education is now an important social field faced with all kinds of social problems but also an instrument for economic development from an individual and society point of view. Small wonder this field is attractive for all kinds of academic disciplines, leaving all stakeholders, not only teachers, with the problem how to weigh the various perspectives.

What at first looked like a contrast, a gap between education practice and education research notwithstanding the availability of research services, researchbased knowledge and professional support for school teachers, is by a closer look no contrast at all. It is the diagnosis that fails. There is no gap because the traditional educational research community drifted away from the education community, also in terms of personal relations; the gap first of all is the outcome of what I would like to call *the scale factor*. On the one hand education is nowadays an object of research for many academic disciplines, advisory bodies, etc. On the other, research findings have to find their way in a still expanding sector with a diverse employment structure. More findings have to find their way into a large and diversified sector.

3.3 And What is the Solution?

A blind spot of many researchers is the belief that they have the key for making findings relevant for practitioners. Practitioners, if only better addressed, are waiting for research outcomes of the projects run by researchers. In other words, it is mainly a question of language and willingness on the side of individual researchers to overcome this gap (Van Braak and Vanderlinde 2012). This assumption can be questioned on several grounds:

• Problems in education can be multidimensional, as we have seen in the example of early school leaving; in many cases a researcher or research project might be helpful in solving an aspect of the puzzle, but not the whole puzzle;

- Who is to be addressed by researchers? The most favourite target group is teachers, while—in particular in Dutch VET—a lot of new specialist staff and management positions have been created with new responsibilities and mandates;
- Dynamics of research and education are non-compatible, as changes in education programmes and the organisation of education are most of the time planned in the summer; the window of opportunity for implementing research findings is rather small;
- Researchers are likely to forget differences between the knowledge position of people working in education and people researching education; while researchers are dedicated to bring their new insights to the fore, people working in education might have questions that can be perfectly answered from outcomes of previous research;
- In many cases it is not enough to inform about new findings; knowing about findings should not be mixed up with having a real impact on, for instance, classroom behaviour. Either because it is not realistic to assume new routines to be developed from reading only, or because findings might contrast with the intuitions (Blik et al. 2012) or the interests of practitioners (Funnekotter 2012);
- Not only researchers bring knowledge into the practice of education. Apart from attending seminars, conferences and workshops, teachers (and other professionals in education) subject their experiences to peer assessments and participate in school-based evaluation projects. In other words, they become familiar with research methodologies or even apply these methodologies (Gibbons et al. 1994).

The answer to the question raised in this article ('will it be possible to find new ways to organise VET research as a public body—in terms of accessible for educational practice—of knowledge?') should take into account that developments in education are assessed from subjective points of view. Apart from the fact that it is a day's job to unite all stakeholders (For VET: national Government, national industry, local industry, Secondary Education, Higher Education, the Student Union, Associations of Parents, Local Communities, Teacher Unions, the Association of VET colleges, local authorities, etc.) on a collective research agenda, the overarching policy aims of education are conflicting in themselves. From a system point of view, Dutch VET should be (i) accessible for great numbers of students and (ii) effective in terms of educational productivity and (iii) should deliver students with the highest level of competences in terms of diploma level. It is not hard to imagine that stakeholders hold different views (positional observations) on the relative importance of each of these three aims, and hence on priorities in addressing and framing educational topics in research programmes.

For this reason, Laur-Ernst and Hanf's suggestion that the research community should take the lead in identifying and specifying innovation needs, as well as in generating and collaboratively shaping innovations, their testing and evaluation is not very helpful. Research does not have the authority anymore to operate as an 'anticipatory initiator' involved in generating and supporting innovation (2008). Nostalgia for the days when the research community still held authority can also be traced in Humes' idea that governments should take responsibility for providing 'high quality research-based evidence and advice to Ministers and officials to inform policy development (Humes 2007, p. 74).

Secondly, any answer should take into account that the education and the research communities cannot be bound on complementarity of roles. As we have seen, both communities have grown in scale and complexity. Other ways of bringing the communities together are needed.

Is it a good way to bring researchers and people working in education together on an individual bases? A much promoted solution is cooperation (co-creation) between professionals in education and researchers in research projects, starting with co-deciding on the research questions and ending with co-deciding on the interpretation of the data (Elström 2008; Den Boer et al. 2011). However, these types of solutions might fill the gap from a social point of view, it is not a satisfactory answer to the question for reasons of effectiveness and—by definition—the limited scope of a single research project. An answer to this question should be based on a concept of a public body of knowledge, not on personal relations between researchers and people working in educational practice.

Wenger (1999) stresses the importance of boundary crossings between communities. The concept of boundary crossing is coined by Engeström et al. 1995 in the meaning of identifying ways of cooperation, despite differences in concepts, traditions, perspectives and values, between professionals from different backgrounds; for instance from the world of industry, science and education. Boundary crossing is facilitated by so-called boundary crosser or brokers. In the words of Wenger: 'Some people act as brokers between communities. They can introduce elements of one practice into another. Although we all do some brokering, my experience is that certain individuals seem to thrive on being brokers: they love to create connections and engage in 'import–export', and so would rather stay at the boundaries of many practices than move to the core of any one practice.' (Wenger 2000, p. 235).

Brokers define their mission in organising border trafficking between communities or groups. For instance by their participation in a variety of networks, by maintaining personal relations with different kinds of professionals, by attending meetings, as well as disseminating their knowledge and sharing their contacts on both sides of the border. In terms of the chain from previous days, brokers personify the middle ground between the world of education and the world of research. Given the complexity of both worlds though, brokers cannot have a complete overview of what is going on across the border. There is a serious risk of selectiveness and patchiness in the information collected by brokers.

This risk can be faced however, if the concept of brokerage is redefined at institutional level. In promoting the example of cooperation between research and industry to be followed in education, f.i. VET, it is often forgotten that, unlike the industry, education cannot be adapted to the newest research findings as if older findings have already been implemented. Partly, because schools and national bodies do not define research priorities on a comprehensive and progressive research agenda and partly because relevant knowledge might come from many sources (ref. Box 2). Most school-based innovation projects start with a short, and hence patchy review of research findings relevant for the object and aims of this innovation project, although many projects tend to skip this phase and plunge into the deep, constructing new programmes or tools directly because of lacking resources and documentalist skills (Scholtes et al. 2008).

A brokerage institute should collect a wide body of knowledge containing a wide variety of research findings in an optimum of completeness and recency. This institutional brokerage model is based on two dynamics:

- The dynamics of the demand side: responsive to queries from people working in education. For instance, the time frame of school-based projects. Queries might refer to qualitative data, reviews, experts, networks, etc.;
- The dynamics of the supply side: flagging up new findings from various (international) sources to mediate these findings for a wide and varied audience.

Both types of services call for an accumulation of documentation, data and contacts necessary for quick responses from the demand side, as well as an accumulation of experience in how to address a varied non-scientific audience. In other words, in an institutional form brokerage might benefit from the concentration of experiences in what works and what does not in terms of the bones as well as the soft tissue.

Brokerage cannot flourish in a market model; from a market point of view knowledge is transferable, object for purchase and selling in terms of exclusive use for the organisation having commissioned research, or in terms of 'hided' in courses and training exclusively available for clients. Besides, a market model is sub-optimal as many schools projects might have the same type of questions (although not at the same time), while answers are only available for the ones that commissioned the research; there is no platform for collecting and distributing findings.

The very heart of institutional brokerage is knowledge stored in databases, in people, in search routines, in networks, in the research community and the education sector. In terms of storing a brokerage institute collects working knowledge, rather than knowledge workers (Brown et al. 2011).

Second, in terms of activity fields, institutional brokerage provides a boundary space between research and education. By creating institutional space (inter-life) between research and teaching and learning, there is room for evaluation and rethinking ways to store, define and organise data—from a provider and a demand point of view—as well as for rethinking effective (personal and non-personal) ways to transfer information to practitioners.

Box 3: education and research; for always worlds apart?

Recently prof. Dr. Herman Van de Werfhorst, a well-known Dutch sociologist from the University of Amsterdam, pleaded on the opinion page of a national newspaper for more instead of less national testing in primary education. His argument: only standardised tests are able to look beyond a pupil's background. In this, he rejected the claim of primary education teachers that belongs to their professional capacity to assess the potentials of their pupils: '*this is evidently not true*'. (NRC Handelsblad 2013, p. 18). From an academic researcher's perspective Van de Werfhorst is absolutely right. The point is however, that a position opposite teachers (unjustified) beliefs is not very helpful in getting findings accepted, and far more important, for the implementation of a cycle of tests as a formative feedback system used by teachers to evaluate their pupils' learning progress. As much as testing might enhance the career prospects of young people, teachers are and will be needed to guide them through the education system.

The lesson from this example is that, fruitful interaction between education and research cannot stop by sending research findings into the open, assuming they will find their way in the practice. Of course, a brokerage institute has neither the power, nor the means to get findings accepted by practitioners. A brokerage institute does have the position to provide a platform for an exchange of opinions and to facilitate the debate on the relevance of beliefs and facts, though.

3.4 Risks and Challenges

Creating a boundary space is not without risks. The final section of this paper is dedicated to two challenges for brokerage institutes: (1) the question of ownership: who owns this space? and (2) the position of the brokerage institute in selecting information.

3.4.1 The Question of Ownership: Who Owns This Space?

Given its position, a brokerage institute is neither exclusively embedded in the hemisphere of education, nor in the hemisphere of research or the hemisphere of policy making. In 'The Idea of Justice' Amartya Sen stresses the importance of public reasoning and the need for an agent to '*invoke a wide variety of viewpoints and outlooks, based on divers experiences from far and near, rather than*

remaining content with encounters—actual or counterfactual—with others living in the same cultural and social milieu, and with the same kind of experiences, prejudices and convictions about what is reasonable and what not, and even beliefs about what is feasible and what is not' (Sen 2009, p. 45).

A brokerage institute might bask in the light of these words, in full awareness that it has, at the same time, to allow for the interests of organisations and people involved. Indeed, not an easy position! In fact a position that can only survive with active support of the organisations and people involved. In other words, the question is not is 'who owns this space?,' but 'who allows for this space?.'

3.4.2 The Position of the Brokerage Institute in Selecting Information

A vital condition for a brokerage institute is trust. Trust in terms of its agenda (what is on it and what is not) and trust in terms of the information selected to be transmitted. Should a brokerage institute be answerable for the quality of this information or should it rely on the quality and assessment procedures of its suppliers? This question is more relevant as a brokerage institute defies as its mission to re-contextualise research findings in language understandable for nonresearchers, or to transfer findings from academic research as well as working knowledge from practice.

Analogous to the reasoning suggested by Clarke and Westerhuis on conditions for establishing mutual trust in the process of building a European Qualifications Framework (EQF), an important condition for a brokerage institute is to build trust in the integrity of the ways in which information is 'digested' and transferred (Clarke and Westerhuis 2011). Condition sine qua non is a careful, transparent and inclusive process-design of a brokerage institute's working processes, both at institutional and operational levels. Trust has to be built; it will largely depend on the way these building processes evaluate whether a brokerage institute will gain a metaphorical license to operate as an informing or as a reforming agent.

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